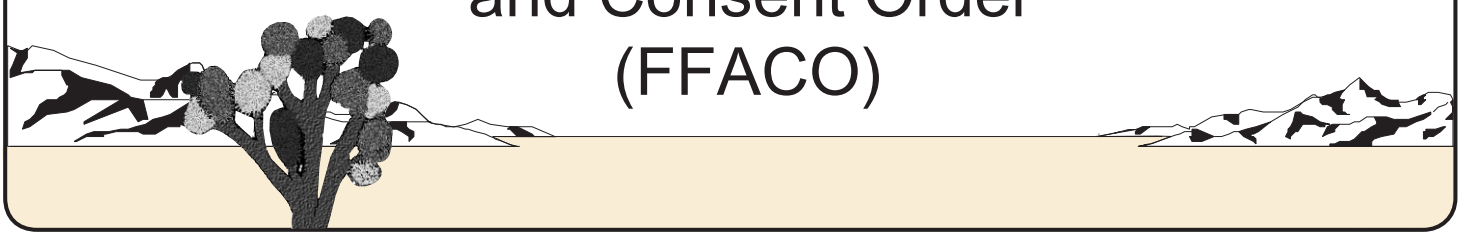
Appendix V

Public Involvement Plan

Revision No.: 3

July 2002

Federal Facility Agreement
and Consent Order
(FFACO)



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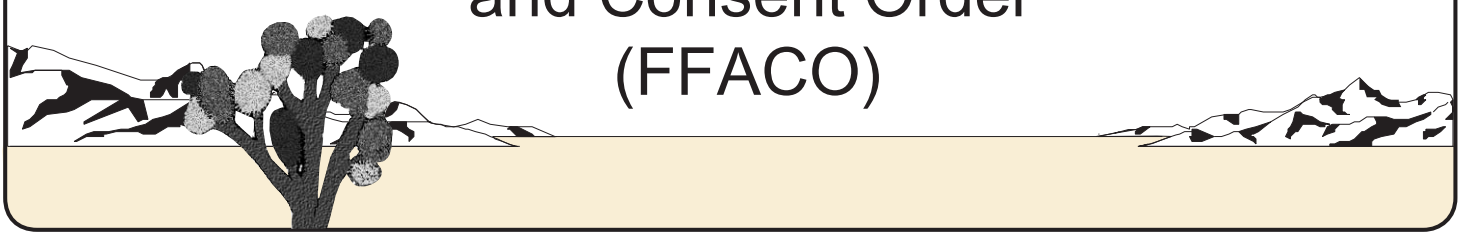

Preface

The Public Involvement Plan (Plan) provides information on how the public can learn about, and become involved in, the U.S. Department of Energy (DOE), National Nuclear Security Administration Nevada Operations Office (NNSA/NV) Environmental Management (EM) Program. The Plan was developed to facilitate a strategy of broad public involvement in all NNSA/NV EM activities, which include environmental restoration, waste management, and technology development. Detailed in the Plan are the various communication mechanisms that were developed to assist the public in establishing a larger role in the EM Program and related activities.

The Plan serves two purposes: it provides a broad public involvement strategy for the EM Program; and fulfills requirements contained in the *Federal Facility Agreement and Consent Order* (FFACO) relating to public awareness and participation for EM activities. Under the FFACO, which was entered into by the NNSA/NV, the State of Nevada, and the U.S. Department of Defense (DoD), sites and facilities potentially contaminated by past DOE and DoD activities must be effectively investigated and corrective actions established to protect public health, safety, and the environment. The Plan, which is incorporated into the FFACO as Appendix V, is a key resource for gaining information on public participation options that relate to NNSA/NV environmental restoration activities.

The major goal of the NNSA/NV public involvement program is to establish and maintain a two-way exchange of information and ideas between the public and the NNSA regarding environmental management issues and priorities. The Plan is a "working document" and will be reviewed and revised periodically to reflect changing information and/or to incorporate new public involvement opportunities that arise as the EM Program evolves. Changes to the Plan will be communicated to the public and made available for review in the NNSA/NV Public Reading Facilities in Nevada. Reading facility locations and telephone numbers are included at the end of Section 4.4.

Section 1.0 of the Plan provides an overview of NNSA's complex-wide EM Program and the EM Program activities that are specific to NNSA/NV. Section 2.0 presents the EM Public Involvement Strategy, which includes descriptions of the various levels of involvement that can be applied to EM work and the participation opportunities that exist at each level. Section 3.0 gives an overview of the roles and responsibilities of Environmental Restoration, Waste

Management, and the Technology Divisions of the NNSA/NV EM Program. The regulatory drivers and agreements that impact the EM Program are explored in Section 4.0 and Section 5.0.

Section 5.0 presents a summary of various public comments and requests that have helped shape NNSA/NV's public involvement activities and, in turn, influenced the objectives of the Plan. Attachment 1 includes a brief description of the Nevada Test Site (NTS) and a historical summary of activities conducted at the NTS and off-site locations. An Information Request Form can be found in Attachment 2.

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List of Acronyms and Abbreviations

The National Nuclear Security Administration commonly uses acronyms in its publications and operations. Acronyms are words formed from the first letter of each major part of a compound term. For example, the National Nuclear Security Administration is typically shortened to NNSA. Acronyms are an effective means of communication, but only when readers are familiar with the representative terms. Below is a list of acronyms used in this document:

CAB	Community Advisory Board
CERCLA	*Comprehensive Environmental Response, Compensation and Liability Act of 1980,* as amended by the *Superfund Amendment and Reauthorization Act of 1986*
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
EA	Environmental assessment
ElS	Environmental impact statement
EM	Office of Environmental Management
FFACO	*Federal Facility Agreement and Consent Order*
FFCAct	*Federal Facility Compliance Act of 1992*
NEPA	*National Environmental Policy Act of 1969*
NNSA/NV	U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office
NTS	Nevada Test Site
RCRA	*Resource Conservation and Recovery Act of 1976*

1.0 EM Overview

In 1989, the U.S. Department of Energy (DOE) in Washington, D.C. created the Office of Environmental Restoration and Waste Management, now called the Office of Environmental Management (EM). The EM Program was instituted at DOE offices around the country to address the environmental liabilities of 50 years of nuclear weapons production in the United States. In 2001, the U.S. Department of Energy, Nevada Operations Office (DOE/NV) changed to the U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office (NNSA/NV). It is the responsibility of the DOE to determine the risk and future cleanup costs associated with environmental contamination, hazardous and radioactive materials and wastes, and contaminated buildings and facilities. The EM Program includes field operations in 11 locations across the country. The EM Program at the NNSA/NV is part of that effort.

Most NNSA/NV EM projects are carried out at the Nevada Test Site (NTS) and the Tonopah Test Range (TTR). Located in Nye County, the NTS is a unique national resource (see Figure 1). The approximately 1,375-square mile site is located about 65 miles northwest of Las Vegas. It is larger than the state of Rhode Island, making it one of the largest restricted access areas in the United States. This remote, arid, and restricted site is predominantly surrounded by tightly controlled federal lands and facilities. The Nellis Air Force Range provides a buffer zone on the east, north, and west borders of the NTS, and the U.S. Bureau of Land Management land provides a buffer zone on the south and southwest borders (see Attachment 1 for an overview of the NTS). Additional EM activities take place at the Central Nevada Test Area and at the Project Shoal location near Fallon, Nevada. Beyond the state of Nevada, NNSA/NV maintains responsibility for the cleanup of contamination at former nuclear test locations in Alaska, Colorado, Mississippi, and New Mexico; however, public involvement activities at these locations are beyond the scope of this document.

The NNSA/NV EM Program is made up of three divisions: Environmental Restoration, Waste Management, and Technology. These divisions have separate yet interrelated roles and responsibilities which are detailed in Section 3.0 of the Plan. Under the EM Program, the divisions operate with the common goals of soliciting and incorporating public comments into the decision-making process, protecting human health and safety, emphasizing environmental responsibility for NNSA activities, and complying with all applicable laws and regulations

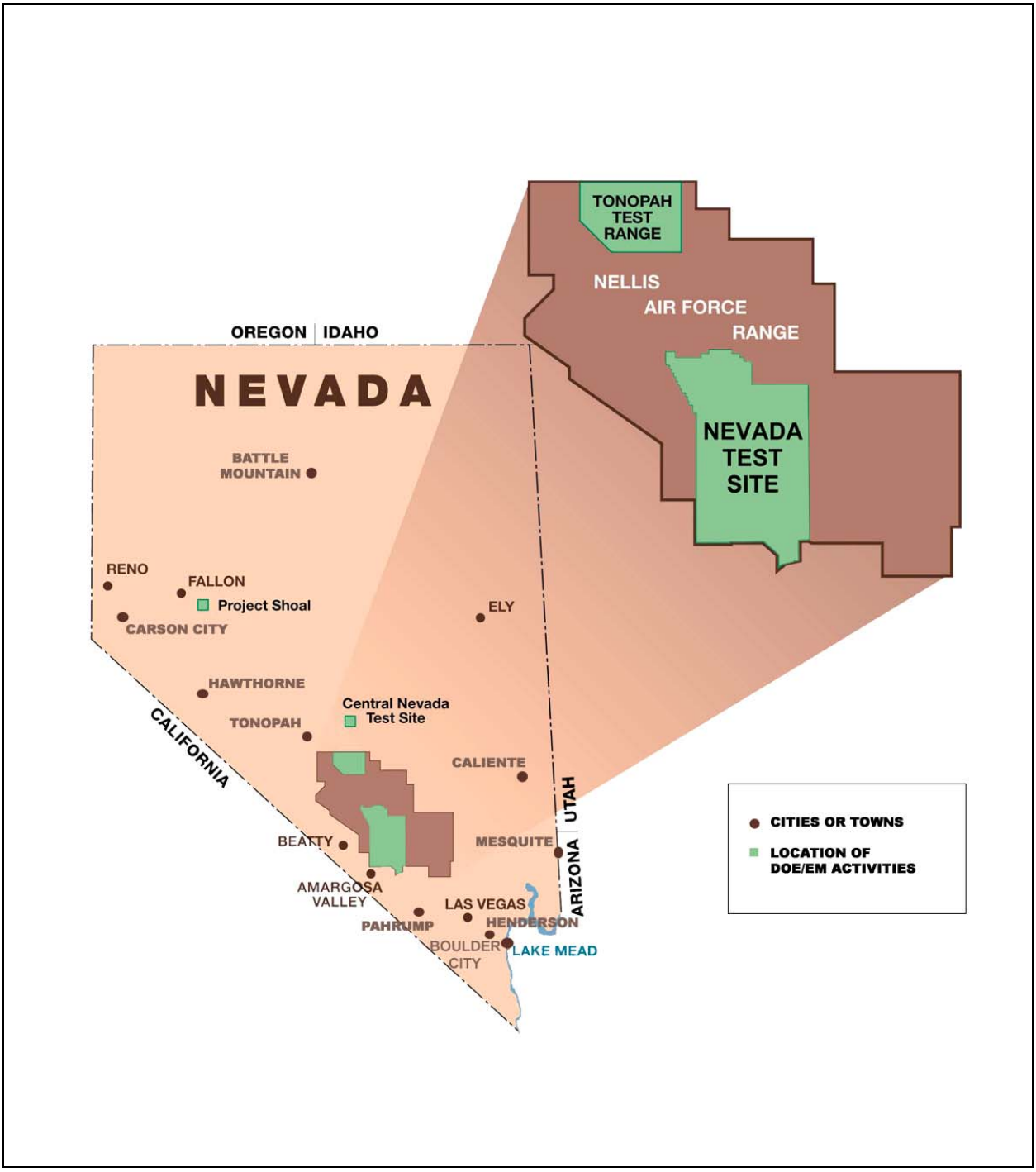

Figure 1
Nevada Test Site and Surrounding Areas

affecting program activities. The laws, regulations, and NNSA/State of Nevada agreements with specific requirements for public interactions include the following:

- *National Environmental Policy Act of 1969* (NEPA)
- *Resource Conservation and Recovery Act of 1976* (RCRA)
- *Federal Facility Compliance Act of 1992* (FFCAct)
- *Comprehensive Environmental Response, Compensation and Liability Act of 1980*, as amended by the *Superfund Amendment and Reauthorization Act of 1986* (CERCLA)
- *Federal Facility Agreement and Consent Order* (FFACO)

A more detailed description of environmental regulations is provided in Section 4.0.

2.0 Public Involvement Strategy

2.1 Strategic Overview

Public involvement has taken many forms since testing began at the NTS. From the publicity surrounding the atmospheric tests in the 1950s, to the protests that have occurred since, to today's peace-time focus, the public has expressed an ongoing interest in activities at the NTS. At a national level, the Openness Policy, enacted by the former Secretary of Energy, Hazel O'Leary, in December 1993, paved the way for the declassification and availability of information and materials regarding the NTS. The policy inspired further changes at the local levels. In 1994, DOE/NV (now NNSA/NV) began conducting formal community relations interviews to establish a dialogue with the public. The interviews helped identify participants' key concerns, attitudes, knowledge, and understanding of the EM Program at DOE/NV. The addition of the Community Advisory Board (CAB) for Nevada Test Site Programs and the monthly CAB meetings provided additional opportunities for public input. This information was candid and helpful, setting in motion a number of programs that would appeal to diverse audiences with different informational needs and interests.

2.2 Participation Levels

People have demonstrated varying levels of interest in NNSA/NV activities. Some individuals have specific interests and attend meetings or request materials only when the related topics address those interests. Others are satisfied to receive information through television coverage and newspaper articles. Still, there are others who take on a more active approach by joining an outreach effort and/or volunteering to serve on the CAB for Nevada Test Site Programs or on one of the Board's subcommittees.

This public interest and involvement has been classified at four basic levels (see Figure 2). These levels are divided as aware, informed, involved, and highly involved, and are defined as follows:

- ***Aware*** - Broadcast and print media are usually the first place people turn to get current, issue-oriented information. This helps increase awareness of events and activities taking place at the NTS. To facilitate this flow of information, NNSA/NV personnel prepare news releases, schedule news conferences, conduct media interviews, and place advertisements in local newspapers. The CAB Public Outreach effort makes additional information available to the general public concerning topics that are covered at CAB meetings relating to various NNSA/NV EM Programs.

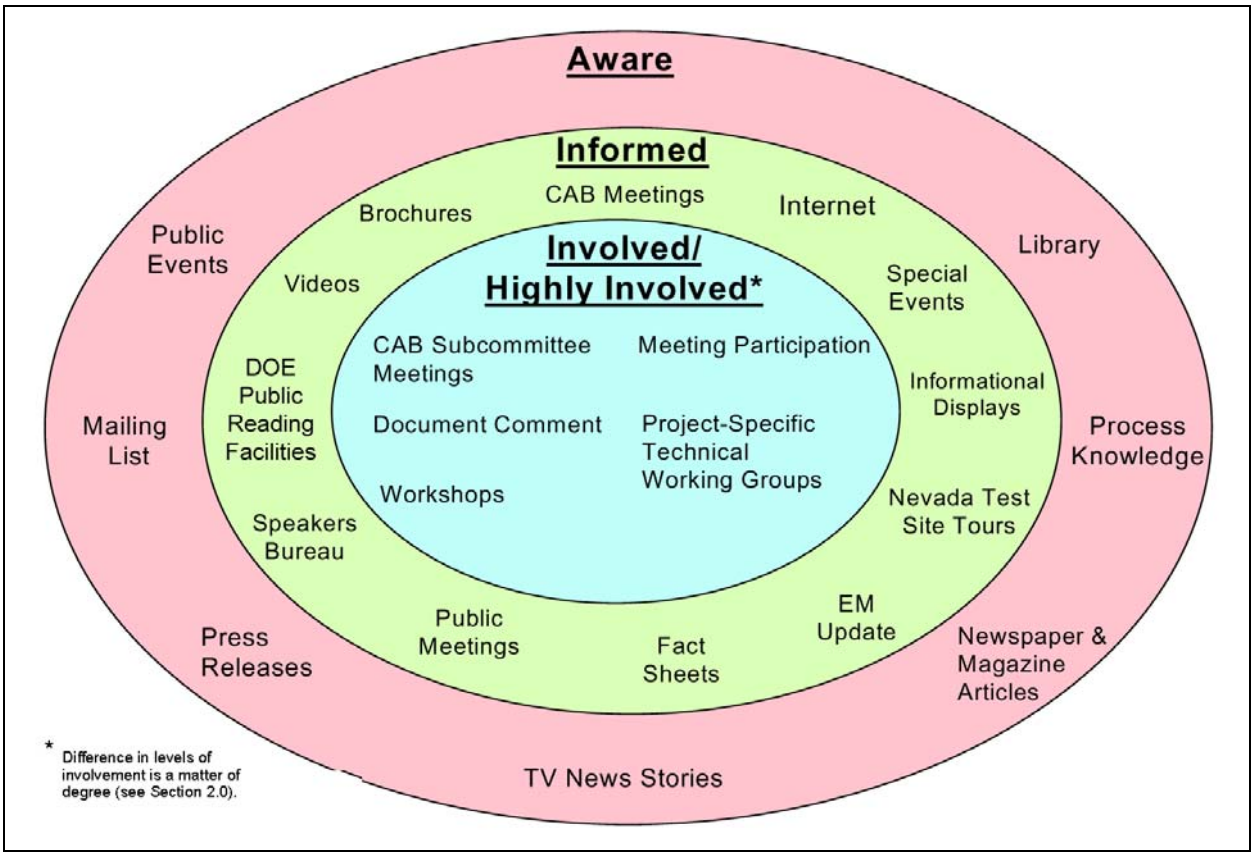

Figure 2
Levels of Public Involvement

- ***Informed*** - Those individuals who actively seek out information on a particular topic, subject, or program fall into the category of wanting to become informed. Information can be attained by attending a public meeting; requesting to be added to the mailing list to receive notices of upcoming meetings or events, or to receive specific informational materials such as the EM Update; reading topical fact sheets, publications, and brochures; browsing DOE/EM Internet sites; requesting displays for special events; touring the NTS; and requesting guest speakers for meetings, conferences, and luncheons.

- ***Involved*** - When attending meetings or reviewing written materials, a person is inspired to dig deeper or find answers to questions; he/she has entered the involvement phase of public participation. The search for more specific answers might result in people voicing their opinions at public meetings, participating in workshops, or serving on subcommittees such as those offered by the CAB. Involvement requires a personal commitment and the willingness to devote free time to participate in meetings and read background materials.

- ***Highly Involved*** - When a stakeholder or organization invests the time and effort to attend public meetings and research projects in order to contribute to the decision-making

process, this person or group is highly involved. This level of involvement typically requires researching, reviewing, and formally commenting on public documents; requesting more information or a briefing from key managers; and participating in public meetings to stay current with a project and its potential impact to the environment or public health and safety. People who are highly involved become conversant with the topic, time line, and the "language" of the program and are likely to interact frequently with NNSA/NV decisionmakers.

2.3 Opportunities to Become Aware and Informed

Those who are seeking general information regarding NNSA/NV can utilize a variety of resources. Some public awareness opportunities are available on an ongoing basis, while others are developed in response to a specific project or public demand. The activities are outlined below:

- Request to be added to the **Environmental Management Mailing List**. NNSA/NV maintains a comprehensive mailing list, which contains more than 2,000 names and addresses of individuals and organizations throughout Nevada and several other states. Those on the list receive meeting notices and information on EM projects and activities. Names may be added or deleted to the list by contacting the Public Accountability Specialist at NNSA/NV. Individuals can also be placed on the CAB's mailing list for information on upcoming CAB meetings and/or events.

- Browse local and national EM **Internet sites** provided by the DOE. Visit the local EM site at http://www.nv.doe.gov/programs/envmgmt or the national EM site at http://www.em.doe.gov/. Additional information may be found on the Nevada Division of Environmental Protection (NDEP) site at http://ndep.state.nv.us.

- Read **fact sheets** and **other materials** that provide information about specific projects and overviews of general EM activities. Copies of these products can be requested from NNSA/NV.

- Read the NNSA/NV publication, ***EM Update***, which describes current EM activities, programs, personnel changes, CAB recommendations, and other related information. The publication is distributed on an as-needed basis to those on the mailing list.

- Read and listen for **news releases** and **public service announcements** that describe achievements, events, workshops, meetings, personnel changes, and other items of interest.

- Request a speaker from the **NNSA/NV Speakers Bureau**. Community, academic, civic, and professional groups are encouraged to request a speaker from the NNSA/NV staff and/or contractors to learn more about any one of many environmental topics. To request a speaker, contact NNSA/NV's Office of Public Affairs by telephone at (702) 295-3521.

- Attend **public outreach** programs that feature EM exhibits and displays, such as the annual events celebrating Earth Day. Environmental Management displays can also be requested for use at schools, libraries, conferences, and other special events.

- Take part in an **NTS tour**. Conducted at the request of interested individuals and groups, tours provide a historical background and information about activities at the NTS. To request a tour, contact NNSA/NV's Visit Coordination staff by telephone at (702) 295-0944.

2.4 Opportunities to Become Involved

For people or organizations seeking to become involved in specific projects or activities, the following opportunities are available:

- Visit and use the **Coordination and Information Center/NNSA/NV Public Reading Facility**. The facility contains complete information on EM Program projects and activities, particularly those conducted under the *Federal Facility Agreement and Consent Order*. The reading room locations are provided in Section 4.4.

- Attend **public meetings and/or CAB meetings** that highlight specific projects and subjects. Such meetings may also provide interested citizens with updates of ongoing issues, such as budget activities.

- Provide **public comment and review** of documents such as *National Environmental Policy Act* assessments and plans required by the *Federal Facility Agreement and Consent Order*.

- Request one-on-one meetings or small **informal meetings and briefings** by NNSA/NV to receive timely and ongoing information about such topics as the budget process, cleanup activities, or waste shipments to the NTS.

- Become involved in **educational outreach programs** in which NNSA/NV participates, such as Science Bowl, the JASON Project, and Futures Expo.

2.5 Opportunities to Become Highly Involved

The NNSA/NV provides various opportunities for the public to become involved in the EM decision-making process, often seeking input from the public and, where appropriate and feasible, incorporating that input. Such opportunities arise through participation in workshops and NNSA/NV-related groups like the CAB and the development of topic-specific stakeholder plans. Whenever possible, NNSA/NV offers feedback to the public as to the manner in which its input has been used.

- ***Community Advisory Board*** - In 1994, the CAB for Nevada Test Site programs was officially approved by the U.S. Secretary of Energy. The CAB operates under a national charter approved by the Office of Management and Budget and the General Services Administration. As such, it falls under provisions of the *Federal Advisory Committee Act*. The CAB, which is composed of 15 to 20 individuals, was established to enhance public involvement and input-related to NTS EM activities. Membership is open to Nevada residents, public interest and environmental groups, NTS workers, Western Shoshone and Southern Paiute representatives, local governments, and academia. Ex- officio members include representatives from the NNSA/NV, the Defense Threat Reduction Agency, the State of Nevada, Nye County, and an NTS contractor organization. Meeting notifications are published in local newspapers, aired as public service announcements on radio stations, printed in the *EM Update*, announced on the NNSA/NV homepage (http://www.nv.doe.gov), and sent to individuals who have requested to be included on the CAB's mailing list.

  The CAB provides a convenient and accessible way for individuals or organizations to explore public participation opportunities at all involvement levels. Those wishing to become aware or informed may attend without actively participating in discussions or question and answer sessions. However, those with a keen interest in specific activities or projects may take a more active role in meeting participation or volunteer to be on one of the CAB subcommittees, which focus on such topics as future land use, transportation, low-level waste, diversification, and budget. To submit an application for membership in the CAB, please contact the Public Accountability Specialist listed at the end of Section 5.0.

- ***Public Workshops*** provide a forum for information gathering and dialogue with key decisionmakers and other groups and organizations. Workshops that address specific issues, such as each fiscal year's scope of work, planning, budget, and project prioritization, provide mechanisms for the public to offer input regarding general programmatic decisions. For budget and prioritization issues particularly, the public is afforded opportunities to participate from January to April. Notification of such opportunities is sent to individuals who are included on the mailing list. To be added to the list, call or write the NNSA/NV Public Accountability Specialist, whose address and telephone number are provided at the end of Section 5.0.

- ***Stakeholder Involvement Plans*** are produced as specific projects that are identified, which may have more of a potential to impact the public. These plans contain a description of the project, key dates for project development, and specific opportunities for stakeholders to become highly involved in the issue. The *Intermodal Transportation of Low-Level Radioactive Waste to the NTS Environmental Assessment* is an example of recent programmatic efforts that warranted project-specific stakeholder involvement plans.

- The ***Site Technology Coordination Group*** was created to provide input on how to best utilize and apply technology information to environmental restoration and waste management activities at a local and national level. The group includes NNSA/NV

managers and NNSA/NV contractors. CAB representatives, members of key stakeholder groups, and other invested stakeholders provide feedback to the group upon request.

- The ***Transportation Working Group*** was established in response to public concerns related to the transport of low-level waste and hazardous materials to and from the NTS. Initially, the group focused on local routing issues and provided input for the development of the transportation plan in the NTS Environmental Impact Statement (EIS). This group, which meets on an as-needed basis, includes representatives from the Nevada Department of Transportation; the Nevada Agency for Nuclear Projects; various county governments; the University of Nevada, Las Vegas; the Yucca Mountain Site Characterization Project; and the NNSA/NV. Members have extensive knowledge regarding both transportation issues and hazardous materials. A mailing list is maintained to advise interested stakeholders of upcoming meetings.

3.0 EM Division Overviews

3.1 Environmental Restoration Division

The NNSA/NV Environmental Restoration Division addresses contamination from historical nuclear weapons programs at NNSA/NV facilities and sites. The contamination resulted from nuclear testing and related support operations, nuclear rocket experiments, and nonnuclear experiments. Contaminants include radioactive materials, unexploded ordnance (UXO), gasoline, oils, solvents, and heavy metals such as lead.

Environmental Restoration Division objectives are to identify the nature and extent of the contamination and assess the potential risk the contamination poses to the public and the environment. About 2,500 potential environmental restoration sites have been identified to date and range from locations where car batteries have been discarded to craters formed by underground nuclear tests. Major environmental restoration activities include:

- ***Groundwater studies*** -- Scientists and engineers are studying the effects of underground nuclear testing on the groundwater at the NTS and in the surrounding area, and they are evaluating appropriate corrective actions (see Figure 3).

- ***Soils remediation studies*** -- This program conducts assessment and corrective actions for surface soils contaminated primarily from safety experiments, cratering experiments, and atmospheric nuclear tests (see Figure 4).

- ***Industrial sites*** -- Areas used for activities such as the septic systems, leachfields, unexploded ordnance, drilling muds, and cuttings are called industrial sites. These locations are being assessed and corrective actions performed, as appropriate (see Figure 5 and Figure 6).

  Industrial sites activities also include the deactivation and decommissioning of NTS facilities that are no longer used, are not going to be used in the future, and are known or suspected to be contaminated. After contamination levels have been identified and contaminants have been removed from the facilities, they are sealed, dismantled, or converted for nonnuclear uses. Industrial sites are located on the NTS and TTR.

- ***Off-sites*** -- NNSA/NV is responsible for characterizing and remediating testing sites located outside of the NTS, including sites near Fallon, Nevada; Central Nevada; Rifle and Grand Valley, Colorado; Farmington and Carlsbad, New Mexico; Hattiesburg, Mississippi; and Amchitka Island, Alaska (see Figure 7). As noted earlier, this Plan only covers the off-site activities within the state of Nevada.

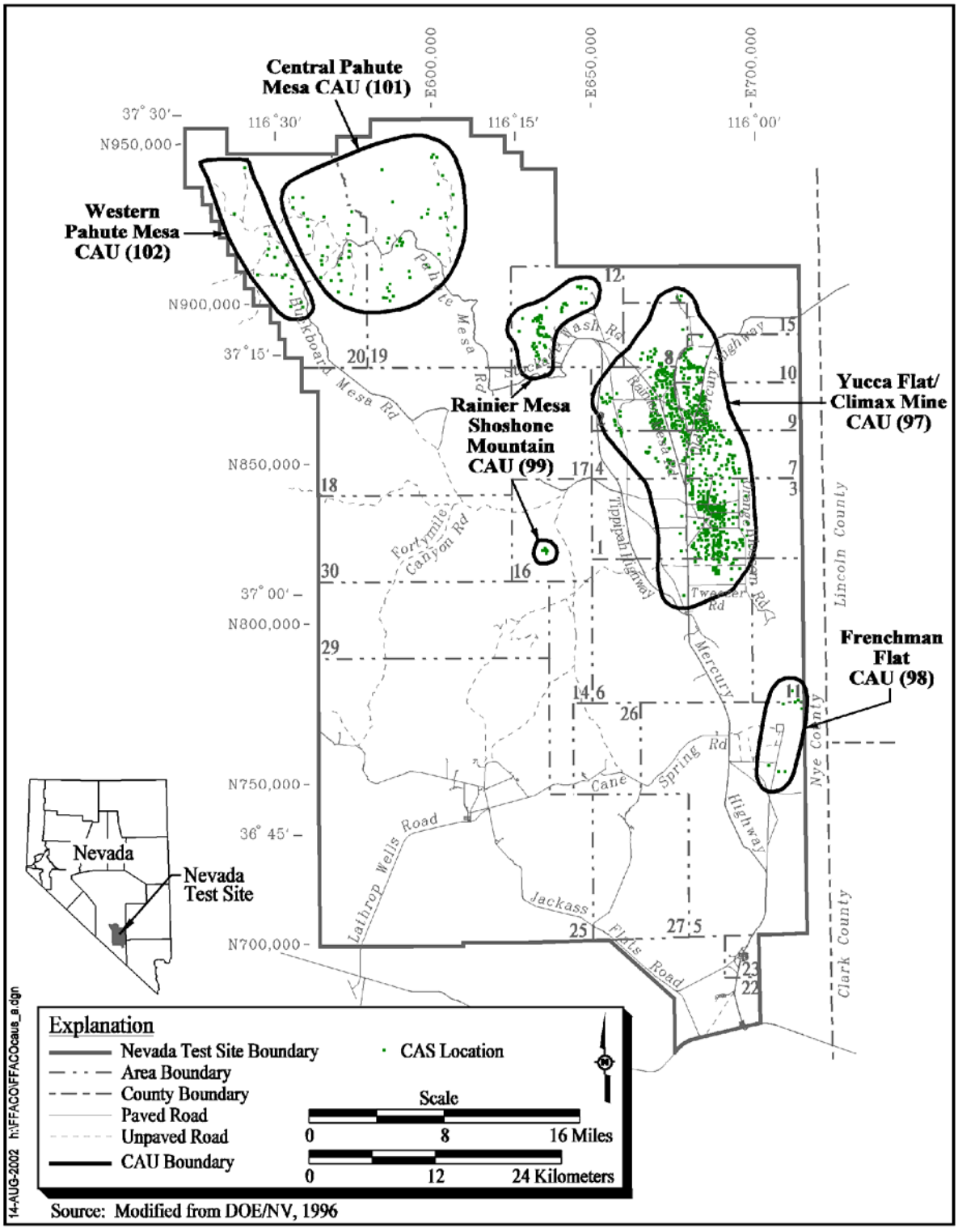

Figure 3
Underground Test Area (UGTA) Corrective Action Sites (CAS) and Corrective Action Unit Boundaries

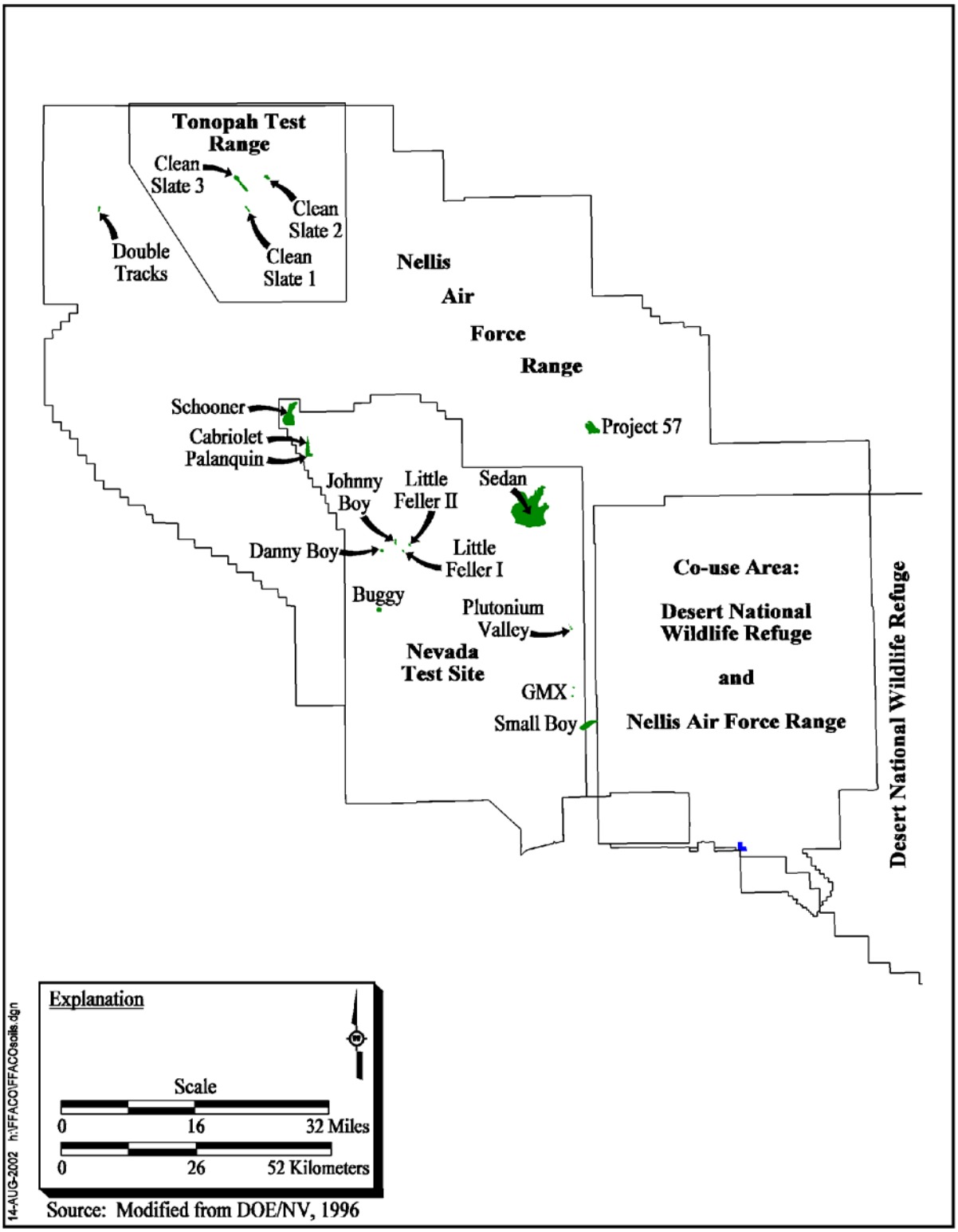

Figure 4
Areas of Surface Soil Contamination

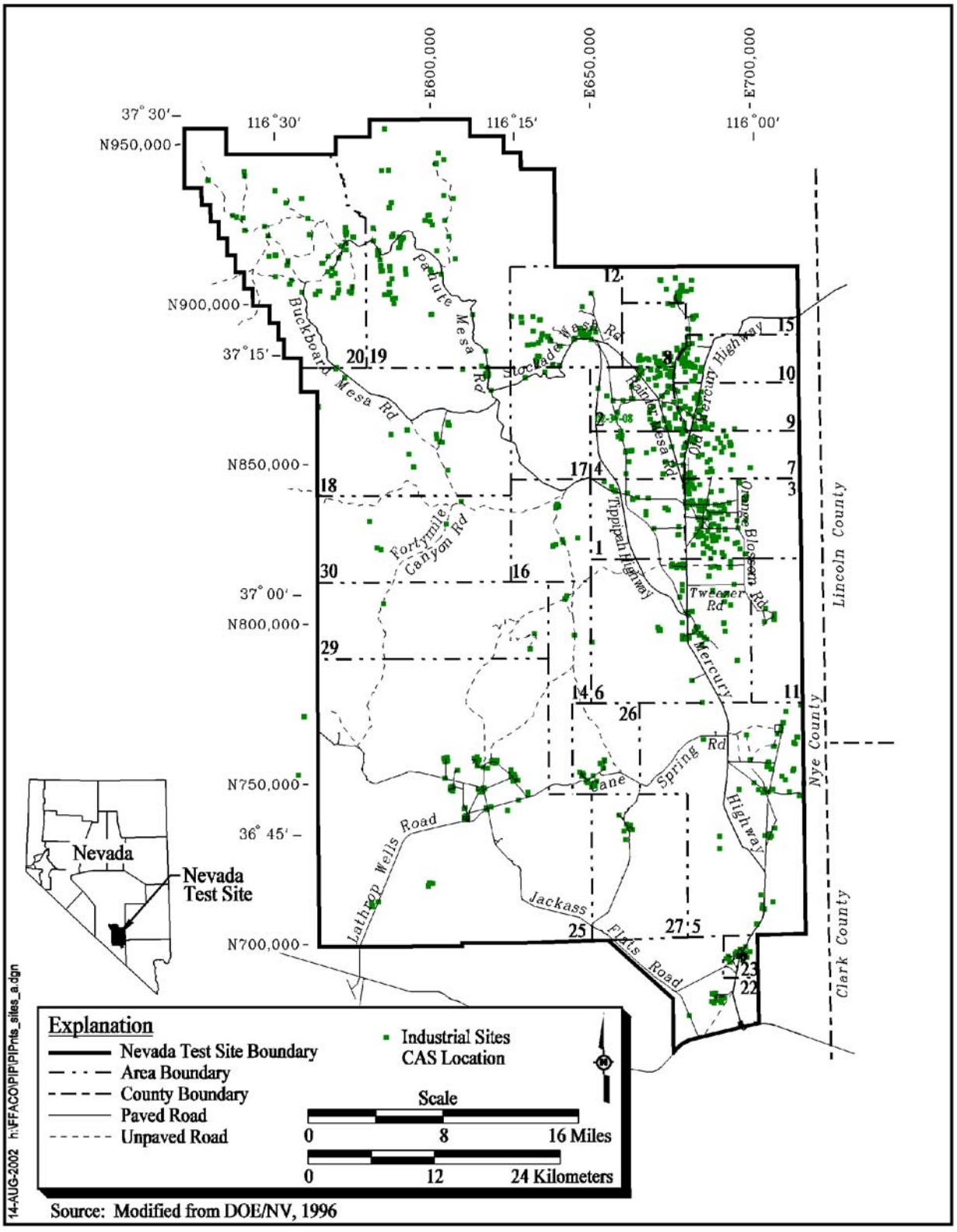

Figure 5
Industrial Sites Corrective Action Sites at the NTS

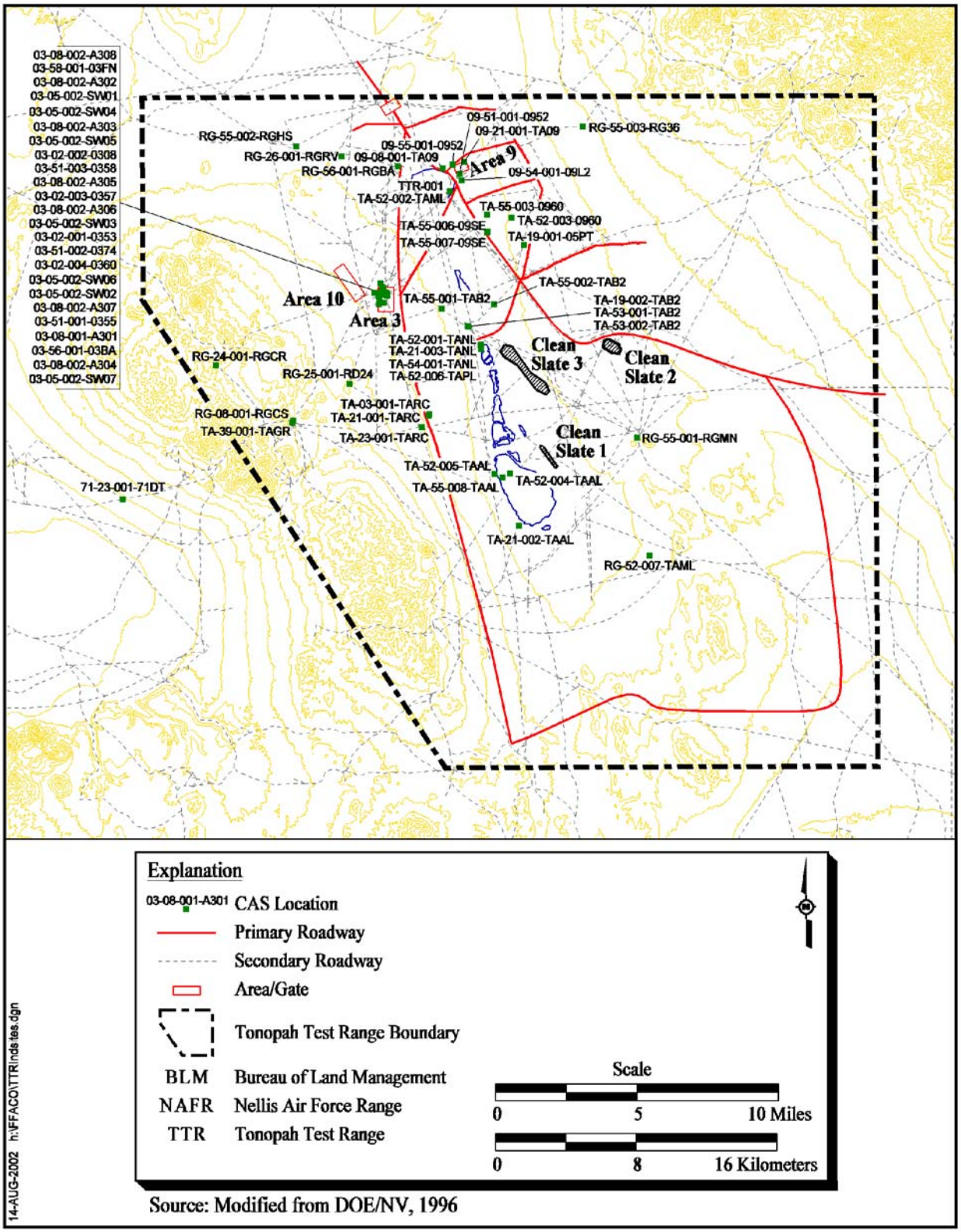

Figure 6
Industrial Sites Corrective Action Sites at the TTR

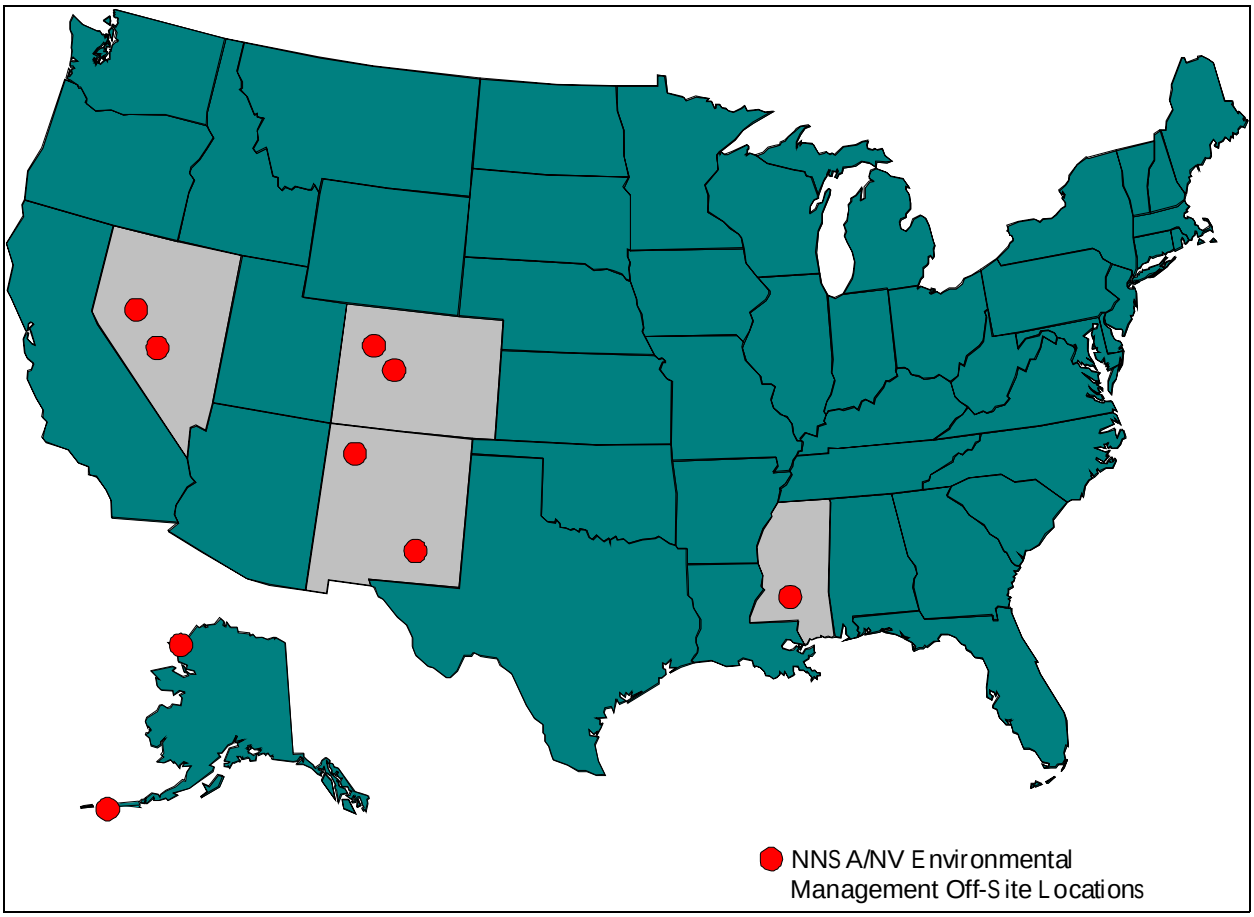

Figure 7
NNSA/NV Off-Site Locations

3.2 Waste Management Division

The Waste Management Division is responsible for the management and disposal of low-level radioactive waste from the NTS and other DOE and DoD facilities. The Waste Management Division also stores mixed waste and disposes of NNSA/NV-generated in-state waste that meets land disposal restrictions. The objective is to protect the environment and the public's health while minimizing, treating, storing, and disposing of waste generated at DOE sites.

Low-level radioactive waste is disposed of in shallow landfills and craters at two locations on the NTS. Under an agreement with the State of Nevada, about 800 cubic yards of mixed transuranic waste is also stored at the NTS until it can be shipped to the Waste Isolation Pilot Plant near Carlsbad, New Mexico. Hazardous waste is accumulated at the NTS and shipped off site to a permitted treatment, storage, and disposal facility.

Additional waste management activities include the following:

- ***Radioactive Waste Acceptance Program*** -- This program ensures that facilities generating low-level radioactive waste destined for disposal at the NTS are capable of managing and transporting radioactive waste in a compliant manner.

- ***Performance Assessment*** -- An assessment and characterization program determines the suitability of sites for waste management activities. Waste management sites are closely monitored to make sure that wastes are properly contained within the disposal cells and that any released contamination does not spread.

- ***Emergency Response Training*** -- Highway accident response training for radiological emergencies is conducted through specially designed courses for state and local emergency personnel.

- ***Transportation*** - The Waste Management Division is responsible for the safe, efficient, and cost-effective packaging and transportation of NNSA materials, such as radioactive and hazardous materials and wastes. Other responsibilities associated with transportation include preparing and analyzing transportation data in support of local transportation efforts. In turn, NNSA/NV can encourage approved low-level radioactive waste generators and their contractors to use transportation alternatives that would further minimize radioactive risk and enhance safety. Other national decisions outside the scope of NNSA/NV are not covered by this Plan.

Specific waste types include the following:

- ***Low-level radioactive waste***, which is the most common waste type disposed of at the NTS, typically consists of soil, rags, papers, equipment, solidified sludge, concrete, building materials, and discarded protective clothing contaminated with low levels of radiation. Low-level radioactive materials are taken to one of two radioactive waste management sites in Areas 3 and 5 at the NTS (see Figure 8). From the early 1970s to the end of 2001, 816,378 cubic yards of low-level radioactive waste were disposed of in the two waste management areas.

- ***Hazardous waste*** consists of toxic, reactive, or ignitable substances. Hazardous waste is not radioactive and includes materials such as waste chemicals, fuels, and paints. Hazardous waste stored at the NTS is sent off site to licensed, commercial facilities for recycling, incineration, or disposal, or, if it contains explosive materials, is treated on site at the Explosive Ordnance Disposal Unit.

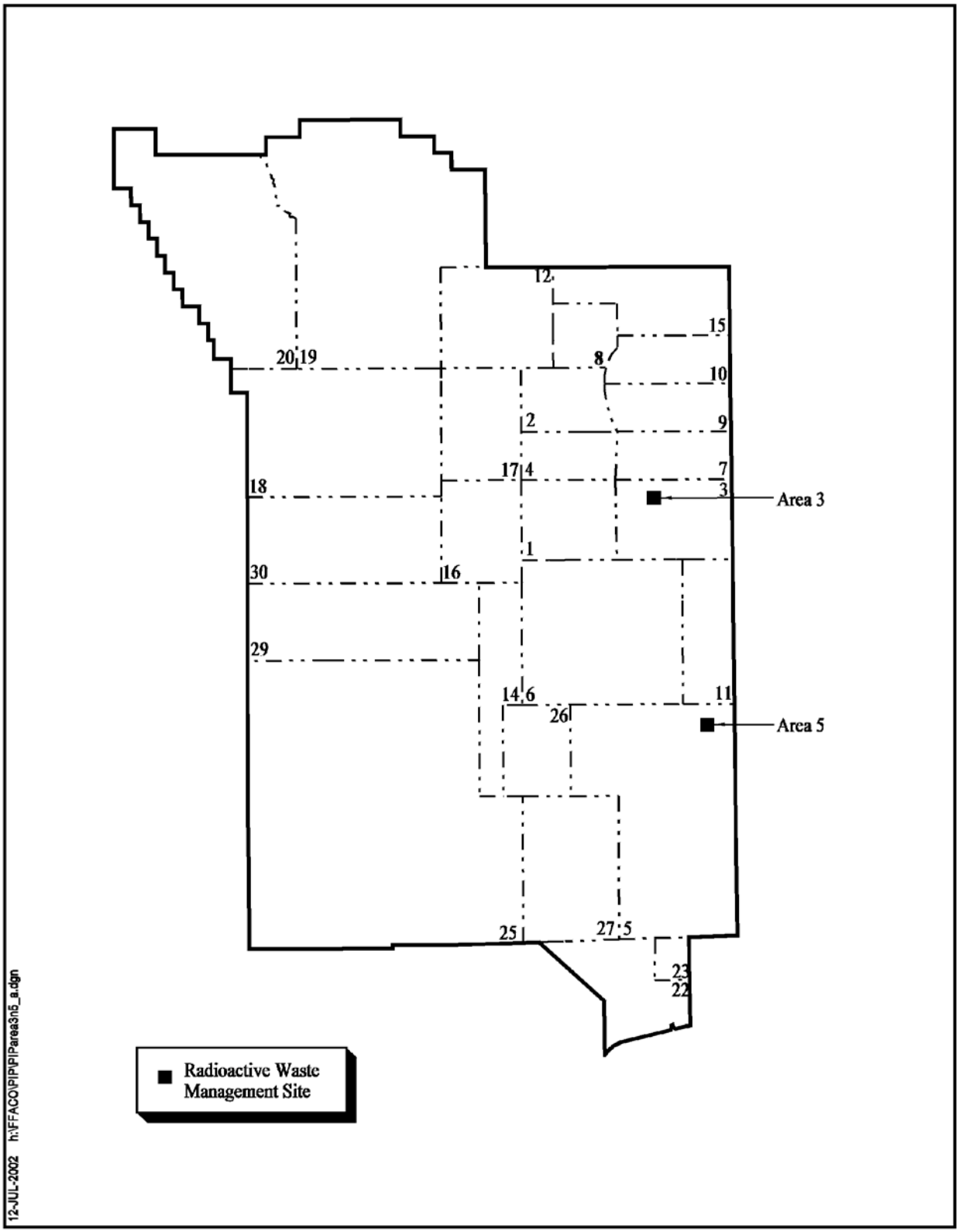

Figure 8
Area 3 and Area 5 at the NTS

- ***Mixed waste*** contains both radioactive and hazardous components. The NNSA/NV currently operates a mixed waste disposal unit and, since May 1990, has accepted only mixed waste generated in state by the NNSA/NV. The NNSA/NV recently reapplied to the State of Nevada for a permit that would allow the NTS to receive mixed waste from off-site generators. Mixed waste is disposed in a shallow land burial unit at the Area 5 Radioactive Waste Management Site or stored aboveground on a *Resource Conservation Recovery Act*-compliant storage pad awaiting treatment and/or disposal.

- ***Transuranic waste*** contains radioactive isotopes heavier than uranium, thus the term "trans" (or "beyond") uranium. This type of waste is produced during reactor fuel assembly, nuclear weapons production, and fuel reprocessing operations. Transuranic waste radioactivity decays very slowly and requires long-term isolation. The NTS stores hundreds of containers of transuranic waste aboveground on the TRU Pad, but does not currently accept transuranic waste from off site for storage. The NNSA plans to dispose of transuranic waste at the Waste Isolation Pilot Plant near Carlsbad, New Mexico.

- ***Sanitary waste*** contains no hazardous or radioactive components. The NTS handles its own solid and liquid wastes using landfills and water treatment facilities similar to those found in metropolitan areas.

3.3 Technology Division

The Technology Division supports environmental management activities through the investigation, demonstration, and deployment of innovative technologies. Program activities fall with the Division's two teams: the National Program Team, which focuses on the investigation of technologies that affect activities across the entire DOE complex; and the Nevada Programs Team, which targets technologies that more specifically address environmental remediation and site monitoring needs at Nevada sites.

The Technology Division specifically supports NNSA/NV EM and coordinates the following programs:

- ***The Characterization, Monitoring, and Sensor Technology Crosscut Program*** - This is a national program that develops and deploys environmental management technologies at DOE sites throughout the country. Among the areas explored are characterization, monitoring, and sensor technologies applicable to environmental restoration and monitoring; radioactive and hazardous waste management; and facility deactivation and decommissioning. On behalf of the DOE/Headquarters, NNSA/NV manages the daily efforts of the Characterization, Monitoring, and Sensor Technology Crosscut Program which is comprised of a matrixed subset of federal and contractor personnel within the EM organization.

- ***Site Technology Coordination Group*** - The purpose of this group is to understand the technology needs of the Environmental Restoration and Waste Management programs, facilitate partnering and leveraging of resources, and identify and implement technologies to expedite and economize NTS remediation and waste management activities. The Site Technology Coordination Group has assisted the Environmental Restoration Division by demonstrating a variety of new or innovative technologies including Alternative Landfill Cover, Personal Ice Cooling suits (PICs), *In Situ* Object Counting System (ISOCS), Vacuum Blaster, Heavyweight Cone Penetrometer, Cone Sipper, and Position Sensitive Surface Contamination Monitor. The Site Technology Group also has hosted workshops to address various technology needs such as monitoring tritium in groundwater. Demonstrations of innovative technologies and workshops to explore technology needs will continue to be conducted in the future.

- ***National Environmental Research Park*** - This program gives professors and graduate students of the University and Community College System of Nevada the opportunity to conduct research and receive environmental training at the NTS. Researchers are encouraged to focus their efforts on the Environmental Restoration and Waste Management technology needs identified through the Site Technology Coordination Group and NNSA program managers.

- ***Advanced Monitoring Systems Initiative*** - The purpose of this activity is to develop state-of-the-art micro-technology sensor systems for monitoring, with integration of the detection, data collection, communication, and display capability. Emphasis will be placed on establishing a test and evaluation facility at the NTS that will then carry out a vertically-integrated program to take advanced sensors from the laboratory, link them with delivery systems that will transmit the data from a remote location to a central monitoring station.

4.0 Regulatory Drivers and Agreements

An essential part of the public involvement strategy is to inform the public about laws, regulations, and agreements affecting environmental management. Whether entered into voluntarily or required by law, agreements provide the basis for much of the work conducted by the NNSA/NV.

4.1 Federal Facility Agreement and Consent Order

The FFACO of May 1996 is the dominant regulatory driver for NNSA environmental restoration activities in Nevada. It sets the framework to prioritize specific restoration projects based on risk, agency regulations, and public input. A list of corrective action sites with activities currently in progress can be found in Appendix III of the FFACO. The FFACO also establishes a technical strategy for cleanup activities, maximizes the opportunity to complete multiple corrective actions, and provides for public involvement activities.

Under the FFACO, the NNSA/NV and DoD propose priorities and discuss them with State of Nevada representatives who make recommendations. These recommendations are presented to the public and the CAB for review. Following public input, the State, NNSA/NV, and the DoD will develop a final prioritization of corrective action units for investigation and remedial action.

Throughout the corrective action process, documents are written to detail activities needed to ensure the completion of the corrective action, as illustrated in Figure 9. Figure 9 also describes the public involvement and/or information opportunities that arise during the FFACO corrective action process. The public, as shown in the figure, can learn about the availability of these FFACO documents by attending CAB meetings or by contacting the NNSA/NV. A brief description of each document is listed below:

- ***Corrective Action Investigation Plan*** - provides or references all specific information for planning investigation activities associated with corrective action units or sites. This document must include or reference the management, technical, quality assurance, health and safety, public involvement, field sampling, and waste management information needed to conduct the investigation.

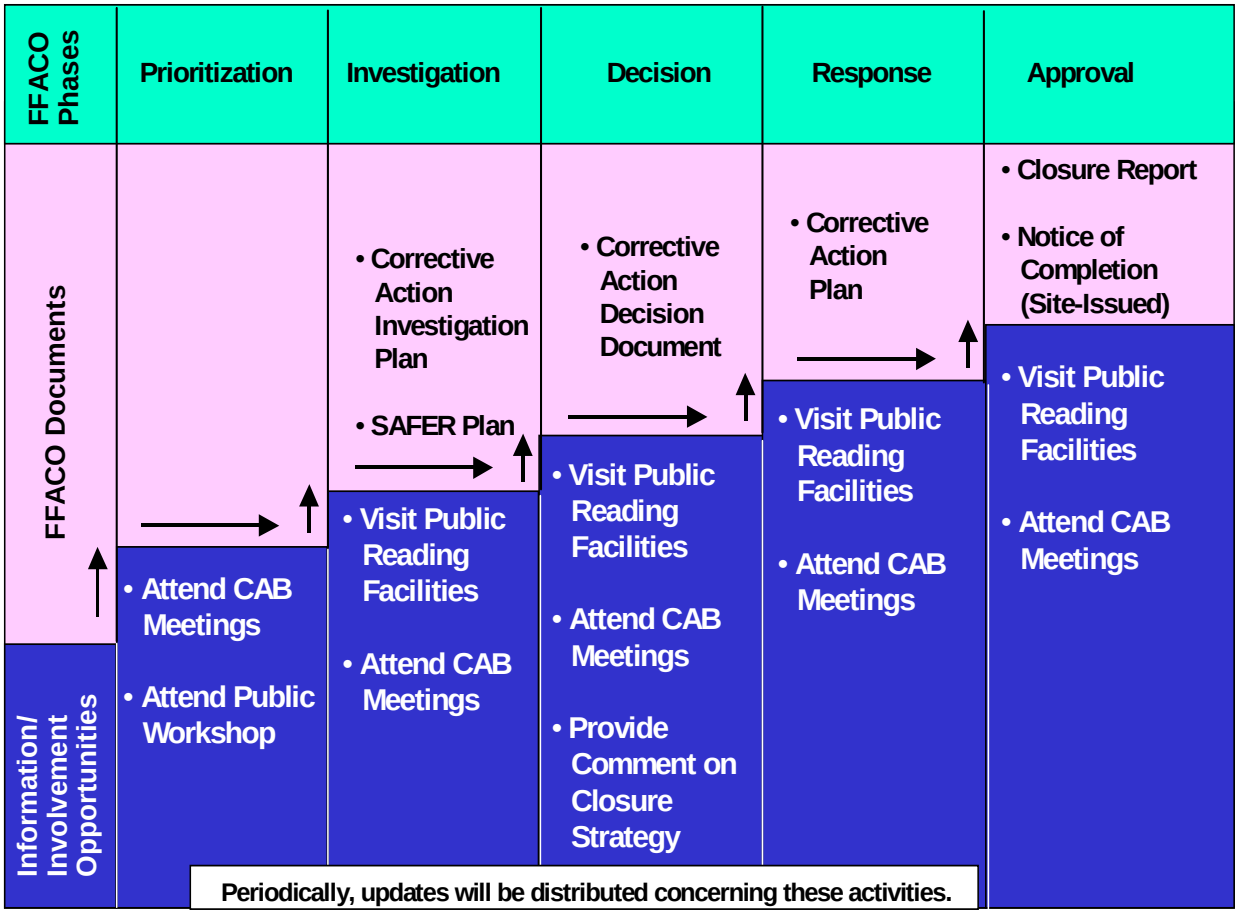

Figure 9
FFACO Corrective Action Process

- ***Corrective Action Decision Document/Corrective Action Plan (CADD/CAP)*** - a document that combines both the results of the Corrective Action Investigation (normally presented in the CADD), and the remediation plan (normally presented in the CAP). The document is developed as a time-saving method when the compliance boundary is well defined, and the remediation alternatives are limited.

- ***Corrective Action Unit Work Plan*** - an optional planning document that provides information for a corrective action unit or collection of units where significant commonality exists. This plan may be developed to eliminate redundant Corrective Action Unit documentation and may contain management, technical, quality assurance, health and safety, public involvement, field sampling, and waste management information. Common information will be referenced in appropriate Corrective Action Investigation Plans.

- ***Corrective Action Decision Document*** - provides a summary of the corrective action investigation and describes the selected remedy and the rationale for its selection, documenting remedial alternatives, ranging from no action to clean closure.

- ***Corrective Action Decision Document/Closure Report*** - a document developed when results from the corrective action investigation indicate that contaminant concentrations are below the level of regulatory concern. The document provides the rationale for no further corrective action and may recommend closure with or without use restrictions or long-term monitoring.

- ***Corrective Action Plan*** - prepared when the Corrective Action Decision Document requires a corrective action. The Corrective Action Plan provides the plan for implementing the selected corrective action alternative and explains how the action will be completed.

- ***Streamlined Approach for Environmental Restoration Plan*** - provides a process for initiating and completing corrective actions at units where enough information exists to select the appropriate remedy before completing an investigation. The plan will incorporate the essential elements of the investigation plan, the decision document, and the action plan.

- ***Closure Report*** - verifies that the completed corrective action was conducted in accordance with the approved action plan and provides (to the State) all necessary support data to confirm the appropriate action took place.

- ***Notice of Completion*** - a State-issued document (usually in the form of a letter) signifying the completion of the corrective action in accordance with approved plans.

Various documents associated with the corrective action process are made available in the public reading facilities.

4.2 Federal Facility Compliance Act-Compliance Order

The *Federal Facility Compliance Act-Compliance Order* (FFCAct), an amendment to the *Resource Conservation and Recovery Act* (RCRA), requires preparation of a Site Treatment Plan for the treatment of legacy mixed waste. The legacy mixed-waste streams are subject to the Land Disposal Restrictions standards contained in the RCRA. The State of Nevada signed the *Federal Facility Compliance Act-Compliance Order* and approved the *NTS Site Treatment Plan* in March 1996. This Consent Order contains schedules derived from the Site Treatment Plan and identifies specific treatment facilities for treating the identified mixed-waste streams on the NTS. If the NTS complies with the Site Treatment Plan and Consent Order, then it is exempt from fines and penalties for mixed-waste storage prohibitions under the RCRA.

4.3 Agreement in Principle/Joint Low-Level Waste Oversight Agreement

The NNSA/NV (formerly DOE/NV) and the State of Nevada entered into an *Agreement in Principle* which is intended to assure the citizens of the State of Nevada that NNSA protects the public health and safety as well as the environment through existing programs and commitments. State of Nevada officials validate this effort through a program of independent monitoring and oversight of NNSA/NV daily operational activities. An appendix to the Agreement in Principle is the *DOE/NV-State of Nevada Joint Low-Level Waste Oversight Agreement*, a cooperative oversight arrangement between the NNSA/NV and the State of Nevada which allows the State an increased role in monitoring the management of low-level wastes generated and disposed of at the NTS. By entering into the agreement, the NNSA/NV and the State agree to share information concerning waste types and quantities in addition to any general information that allows the State to conduct detailed oversight of waste disposal operations.

4.4 Other Regulatory Drivers

Throughout EM processes, the NNSA is bound by various federal and state laws. Three of these laws (the *Resource Conservation and Recovery Act*, the *Comprehensive Environmental Response, Compensation, and Liability Act*, and the *National Environmental Policy Act* [NEPA]) are highlighted below.

The ***Resource Conservation and Recovery Act*** (RCRA) of 1976 is a comprehensive program for regulating and managing hazardous wastes, nonhazardous solid wastes, underground storage tanks, and for promoting the use of recycled and recovered materials. The RCRA sets a federal policy of limiting land disposal of wastes in favor of other disposal methods, and encourages solid waste management practices that promote environmentally sound disposal methods, maximizes the reuse of recoverable resources, and fosters resource conservation. Federal agencies are required to comply with all applicable federal, state, and local RCRA regulations.

The ***Comprehensive Environmental Response, Compensation, and Liability Act***, as amended by the *Superfund Amendments and Reauthorization Act*, provides for remediation of, and emergency response for, hazardous substances released into the environment and for remediation of hazardous waste sites that present a substantial danger to public health and welfare. Title III, or the *Emergency Planning and Community Right-to-Know Act* of 1986, was added to the *Superfund Amendments and Reauthorization Act* as a free-standing law to address "extremely hazardous substances," and reporting of Occupational Safety and Health Administration-defined "hazardous chemicals." The *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements* enacted in 1993 require all federal agencies to comply with certain

planning and notification provisions of the *Emergency Planning and Community Right-to-Know Act*.

The ***National Environmental Policy Act*** (NEPA) was passed in 1969 and requires federal agencies to fully consider and document all environmental consequences before beginning new programs or constructing new facilities. This applies to any activity which affects the government and is funded or approved by a federal agency. The depth of analysis and level of documentation under NEPA are dependent upon the potential for significant environmental impacts resulting from a proposed action and may range up to an environmental impact statement (EIS). An EIS presents a very detailed consideration of a proposed action or program and its potential impacts. For an EIS, NEPA requires a significant amount of public involvement, including public input during the scoping process and public hearings associated with the Draft EIS.

Preparation of the *Environmental Impact Statement for the Nevada Test Site and Other Off-Site Locations in the State of Nevada* (NTS EIS), which examines alternatives for current and future missions at the NNSA sites in Nevada, was initiated in August 1994. Approval of the final NTS EIS occurred in the fall of 1996. The Record of Decision for the NTS EIS was issued on December 9, 1996, and describes in detail the decisions reached for operation of the NNSA/NV sites and facilities in Nevada.

Generally, for proposed actions for which the severity of environmental impacts are unknown but thought to be insignificant, the agency may prepare a less rigorous level of documentation than the EIS, the environmental assessment (EA). The EA is a concise public document used to determine if a proposed action would, in fact, have significant impacts. If the analyses in the EA demonstrate that potential impacts would be insignificant, the agency may prepare a "Findings of No Significant Impact" and proceed to implement the project. If the EA identifies potentially significant environmental impacts, the agency must then prepare an EIS before implementing an action. Public review requirements for an EA are generally less stringent than for an EIS, and no public hearings are necessary. Final EAs and "Findings of No Significant Impact" are made available to the public and are placed in public reading facilities.

Proposed actions that fit within certain predefined classes of action and meet other rigorous requirements may be considered categorically excluded from further consideration under NEPA. If a project is categorically excluded, no further analyses or documentation would be required for purposes of NEPA.

Under NEPA, information must be made available to state and federal agencies, potentially affected American Indian tribes, and the public before decisions are made. The NEPA process depends on public involvement which impacts decision making more directly as people take a more hands-on interest in environmental issues.

For more detailed information regarding laws and regulations, contact the librarian at the **Coordination and Information Center NNSA/NV Public Reading Facility** at (702) 295-1628. Reading rooms are currently located at 2621 Losee Road, Building B-3, North Las Vegas, Nevada 89030 (telephone [702] 295-1628) and at the Nevada State Library & Archive, 100 N. Stewart Street, Carson City, Nevada 89701 (telephone [775] 684-3326). Web site information may also be obtained through the reading facilities.

5.0 Conclusion

This Plan details the various mechanisms that interested individuals, organizations, and stakeholders can use to gain knowledge about EM activities conducted by the NNSA/NV. Furthermore, the Plan offers communication techniques that will appeal to people with varying levels of interest. The overall goal of the Plan is to reflect the NNSA/NV's commitment to involve the public as projects are developed and decisions are made.

The Plan represents a culmination of comments and suggestions offered by the public and attempts to satisfy those that are most relevant. For the most part, the public is asking for clear, understandable summaries of technical data as well as general background information. Responding to this request, the Plan not only offers clear, concise descriptions of programs, but also details public involvement opportunities and communication channels that can enhance the learning process for the layperson. As the NNSA/NV strives to accommodate the perspectives of both technical and nontechnical audiences, further efforts are being made to include easy-to-read summaries in all documents. In keeping with public requests, the Plan also makes available crucial background data, such as historical and regulatory information, to help the audience relate to the "big picture" or overall program, project, or division objectives.

Public participation, which often provides the NNSA/NV with the insight needed to develop programs and prioritize work, is important at every level of the decision-making process. The Plan describes a number of opportunities for the public to become part of that process. The NNSA/NV updates the plan as programs change and as the public identifies ways to make our programs and activities more effective. Please take the time to share your comments with us so that the Plan can continue to reflect your needs.

6.0 References

U.S. Department of Energy, Nevada Operations Office. 1996. *Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada*, DOE/EIS 0243, August. Las Vegas, NV.

For more information on any of these topics, please contact:

Kelly Kozeliski
Public Accountability Specialist
Environmental Management Office
U.S. Department of Energy
National Nuclear Security Administration
Nevada Operations Office
P.O. Box 98518
Las Vegas, NV 89193-8518
(702) 295-2836
kozeliskik@nv.doe.gov

Eric Shanholtz
Chief
Environmental, Safety & Health Group
Defense Threat Reduction Agency
Nevada Test Site
P.O. Box 208
Mercury, NV 89023
(702) 295-5227

Attachment 1: *Overview of the Nevada Test Site*

History of the Nevada Test Site

For more than 40 years, the primary mission of the U.S. Department of Energy/Nevada Operations Office (now the NNSA/NV) was to conduct field testing using both nuclear and conventional explosives. Most field testing was performed at the Nevada Test Site (NTS), which was established in 1950 when President Harry Truman authorized the designation of a continental atomic testing area. In addition to weapons tests, areas at the NTS have been utilized for various secondary missions, including neutron and gamma-ray interaction studies; open-air nuclear reactor, nuclear engine, and nuclear furnace tests; hazardous materials spill response testing; and experiments conducted by the Department of Defense involving radioactive and nonradioactive materials. In the 1950s, atmospheric tests were carried out at the NTS until the Limited Test Ban Treaty went into effect in 1963, ending testing activities in the atmosphere, the oceans, and space. After July 1962, all nuclear tests in the United States were conducted underground, most of them at the NTS. Following a presidential mandate, nuclear weapons testing was suspended in October 1992, with a stipulation that a readiness posture must be maintained.

To date, there have been 1,054 nuclear tests conducted by the United States, 928 of which were performed at the NTS. These operations generated residual radioactive and hazardous waste that contaminated the surface and subsurface environment. The DOE established the Environmental Management Program to address the issue of remediating and disposing of accumulated waste and contamination.

The NNSA's primary mission has shifted from nuclear testing to stockpile stewardship. Activities at the NTS also reflect NNSA's changing mission. Work conducted at the NTS now focuses on subcritical and other weapons physics experiments, emergency management and test readiness activities, environmental restoration, low-level radioactive waste management, and work for national security organizations and experimental programs. In an effort to further diversify opportunities at the NTS, the NNSA/NV has developed partnerships with private industry, national laboratories, and other federal, state, and local entities to develop new technologies. Projects range from development of alternate energies to the development of reusable rockets to launch commercial satellites into orbit.

The Environment at the NTS

The NTS is located approximately 65 miles northwest of Las Vegas. Located within the Great Basin, the NTS is home to a diverse and complex mosaic of plant and animal communities representative of both deserts and the transition zone between the deserts. Some 700 species of plants have been found across the NTS. Although extensive surveys over most of the NTS have been conducted, no plants have been identified as threatened or endangered.

Nearly 2,000 types of insects, birds, animals, and reptiles inhabit the NTS. Wild horses range over areas of the NTS. One bald eagle and one peregrine falcon, listed as endangered by the State of Nevada, have been seen on the NTS. The only animal species found on the NTS that is listed as threatened by the State of Nevada and the U.S. Fish and Wildlife Service is the desert tortoise. About eight percent of the NTS has been disturbed by testing and other support activities. The remaining 92 percent supports typical, regional plant, and animal life.

The Nellis Air Force Range provides a buffer zone on the east, north, and west borders of the NTS and the Bureau of Land Management oversees the land bordering the southern and southwestern boundaries of the NTS. This unpopulated area covers some 5,470 square miles, making it one of the largest contiguous unpopulated land areas in the United States.

Attachment 2: *Information Request Form*

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Fact sheets have been produced on a number of Environmental Management Programs. They provide topical information to help people understand a particular activity or a project's significance. Additional fact sheets will be created as new activities take place or as current programs are updated. For information regarding the most current informational materials, please contact:

Kelly Kozeliski
U.S. Department of Energy
National Nuclear Security Administration
Nevada Operations Office
P.O. Box 98518
Las Vegas, Nevada 89193-8518
(702) 295-2836

Other requests:

_____ I would like to request a speaker on _____(topic)

Contact: _____ Daytime Phone: _____

_____ I am interested in having a display set up on _____
(Date)

Environmental Management

- *Environmental Management Overview* brochure
- *Environmental Management Community Involvement* brochure
- *EM Update* quarterly publication
- *Environmental Management Overview* video

Environmental Restoration

- *Environmental Restoration Overview* fact sheet
- *Industrial Sites* fact sheet
- *Deactivation and Decommissioning* fact sheet
- *Groundwater at the Nevada Test Site* fact sheet
- *Offsites: Salmon* fact sheet
- *Offsites: Amchitka* newsletter and update
- *Innovation, Remediation, Restoration: All in Days Work or Industrial Sites Workers* video
- *Groundwater Studies and the Underground Test Area Project* video

Waste Management

- *Waste Management Overview* fact sheet
- *Mixed Low-level Waste Disposal at the Nevada Test Site* information sheet
- *Managing Transuranic Waste at the Nevada Test Site* fact sheet
- *Transportation of Hazardous Materials* fact sheet
- *Transportation Management* fact sheet
- *Low-Level Waste Program at the Nevada Test Site* fact sheet
- *Radioactive Waste Acceptance Program* fact sheet
- *Waste Management Overview* video
- *Radioactive Waste Management Site Tour* CD-Rom

Technology Development

- *Technology Development Overview* fact sheet

Miscellaneous

- *Planning and Budgeting for the Future* fact sheet
- *Regulatory Requirements and Agreements* fact sheet